(b) what steps have been taken to implement these recommendations in case of procurements by Government or PSEs; and

(c) whether Government propose to introduce the offset clause in case of imported machinaries, systems and plants as in case of defence procurements?

THE MINISTER OF SCIENCE AND TECHNOLOGY (SHRI KAPIL SIBAL): (a) The recommendations in the report of the sub-committee on stimulating demand for indigenous technology products covers five categories namely General Industries, Strategic and Defence Sectors,Emerging and New Technologies; Role of Small and Medium Enterprises and Incubation of High Tech Industries. In addition to specific recommendations for these categories, the general recommendations in the report highlight the need to sensitize users about the status of indigenous lab level technologies and initiate appropriate measures to disseminate information of Indian products and awareness of their advantages. The report also recommends purchase of Indian indigenous products which are equal to overseas products in terms of value for money and other criteria especially by the government departments and agencies and stress upon the need for periodic indepth analysis of the cost effectiveness of major R&D projects.

(b) No specific steps, have so far been taken as these recommendations require study from different angles.

(c) Does not arise in view of (b) above.

Setting up of planetarium

146. SHRI T.T.V. DHINAKARAN: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether there is a proposal to set up or financially assist in setting up a planetarium in every district of the country;

(b) if so, the details thereof; and

(c) if not, the reasons therefor?

THE MINISTER OF SCIENCE AND TECHNOLOGY (SHRI KAPIL SIBAL): (a) to (c) No, Sir, there is no such proposal to set up or financially assist in setting up a planetarium in every district of the country. Science based organizations are encouraged to organize sky shows using portable planetariums for school students.

Research and development activities in scientific labs

147. SHRI N.R. GOVINDARAJAR: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether it is a fact that less number of research and development activities have been undertaken in Government scientific labs in the country;

(b) whether it is also a fact that there are merely 157 scientists per million doing scientific research and development in the country, because of poor infrastructure, pathetic incentive, etc. to the scientists;

(c) if so, the details thereof;

(d) whether Government propose to give more incentives to improve the working conditions for scientists in Government labs; and

(e) if so, the details thereof?

THE MINISTER OF SCIENCE AND TECHNOLOGY (SHRI KAPIL SIBAL): (a) to (e) The Government has provided enhanced level of funding during the previous years for research and development activities in the scientific labs and this enhanced funding will continue in the 11th five year plan also. Additionally new programmes in thrust areas like nano-technology, setting up of centres of excellence for advanced materials research, translational research in the area of biotechnology etc. have been initiated. It is a fact that the personnel trained in S&T has increased. However, the number of S&T trained manpower participating directly in R&D for generation of new knowledge has stagnated. This could be attributed to lucrative opportunities available in other sectors and social pressures. The Government is also providing grants for up- gradation of research infrastructure in universities and academic institutions for research and teaching. Government has also plans to provide support for research infrastructure in undergraduate colleges during the 11th Plan. The Government has already provided incentives through increased research fellowships and associate-ships and has also announced J.C. Bose and Ramanujan Fellowships for performing scientists.

Attrition of scientists

148. SHRI T.T.V. DHINAKARAN: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether a large number of scientists are frustrated and desert to private sector;

(b) if so, the reasons therefor; and

(c) the action taken to ensure that their talent and knowledge is not wasted?

THE MINISTER OF SCIENCE AND TECHNOLOGY (SHRI KAPIL SIBAL): (a) and (b) No Sir. However, there are sporadic cases of movement of scientists from Government Research Institutions to Private Sector, due to various reasons including better financial and career opportunities.

(c) Government from time to time have taken several measures to encourage research scientists by providing various incentives. These include:

- Induction of new and attractive fellowships;
- Creation of core groups of professionals with necessary modern facilities required for pursuing research in new and frontier areas of science;
- Creation of new scientific Departments/Organisations;
- Increase in the outlay for science and technology sector in successive Five Year Plan;
- Setting up of centres of excellence/advanced studies/incubation centres in the universities, academic institutions and laboratories;
- Provision of sharing the external earnings with the scientists or innovator and its periodic revision in terms of IPR, Contract Research & Consultancy;
- S&T based training for entrepreneurial development;
- Manpower development training/re-training programmes through associate-ships/ fellowships;